

Goodenough describes a process comprising providing an aqueous solution of bromine and contacting therewith either successively or simultaneously a bromine value stabilizer and an amount of hydroxide additive sufficient to achieve a final pH of from about 8 to about 10 and preferably with a pH of 9.0 to 9.6. Nowhere does Goodenough teach or suggest having a pH of from about 12.0 to about 14.0. In addition, Goodenough requires use of an aqueous solution of bromine whereas the present claims specify use of bromine.

Hamilton is not a relevant reference as it describes how to use an algacide to treat swimming pool water. Thus, Hamilton is deemed to be in a non-analogous art. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992) and *In re Wood*, 599 F.2d 1032, 202 USPQ 171, 174 (CCPA 1979). As made clear as recently as 1996 by Na et al.(the other secondary reference at page 2, second paragraph):

The chemistry of sulfamate-containing systems with halogens is extraordinarily complex and research in this area continues to this day.

Thus anyone seeking help in producing a concentrated aqueous biocidal solution, which of course must be amenable to storage and shipment, would certainly not look to Hamilton for any such help since Hamilton is concerned exclusively with usage of biocides in low concentrations in swimming pool water.

Additionally, Hamilton teaches supplying the active bromine for his process by addition of a water soluble bromide salt, a material which is not used in the presently-claimed process. Moreover, Hamilton's effective bromine concentration is from 0.5 to about 100 ppm and, in fact, teaches away from higher concentration of effective bromine as it turns the water green. Hamilton goes on to state:

While higher concentrations of bromine can be used if the color is not objectionable, e.g., for industrial uses such as cooling tower water, **concentrations above about 100 ppm are not practical as no significant improvement in activity is achieved by using higher concentrations of bromine.**

(Emphasis added.)

This teaching is contrary to – and in fact leads away from – the present invention which deals with producing concentrated, stabilized biocidal compositions. Thus, the present claims are

clearly patentably distinguished over anything that can be derived from Hamilton. Therefore we submit that Hamilton is not combinable with Goodenough, but even if combined therewith, the references would fail to make out a *prima facie* case of obviousness under 35 U.S.C. 103(a).

As to Na et al., the field still grapples with the issues discussed in this and other prior art references. While Na et al. does discuss use of bromine as its bromide compound, the Na et al. process is completely different from Applicants' claimed process set forth in claims 61-65. Na et al. uses a three stage process for producing an alkaline bleach composition. In a first stage, a mixture is made from a hypochlorite source and an amino functional compound, a group of substances which includes sulfamic acid. In the second stage, a bromine compound such as sodium bromide is mixed with the mixture formed in the first stage. Thereafter in the third stage, an alkali base is mixed with the mixture produced in the second stage. Na et al. emphasizes the importance of using a process based on these three stages. For example, at page 5, last paragraph, Na et al. emphasizes this need as follows:

...and to provide a particular process, especially in terms of mixing sequence, to secure the product benefits.

In sharp contrast, the present claims call for an entirely different sequence, namely mixing bromine with an aqueous solution formed from water, sulfamic acid, and alkali metal base. Furthermore, Na et al. requires use of a hypochlorite, a material which is not called for in the present claims. Thus, if anything, Na et al. leads away from the subject matter of claims 61-65.

Moreover, there is no teaching or suggestion in either Goodenough or Na et al. providing motivation to combine their teachings. Quite the contrary – Na et al. emphasizes the need for a three-stage process and thus describes a process sequence that differs from Goodenough's sequences. And even if combined, their teachings fail to suggest the subject matter of claims 61-65. Consequently, no *prima facie* case of obviousness exists or can be derived from the combination of Goodenough and Na et al.

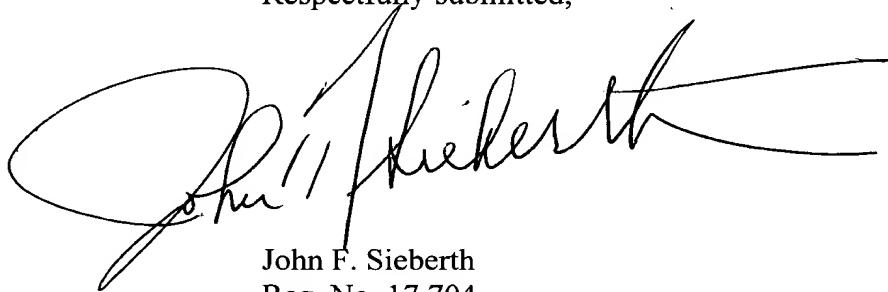
Accordingly, on the basis of the foregoing remarks, the 103 rejection of claims 61-65 on the cited references is deemed untenable, and claims 61-65 are submitted to be allowable, thus paving the way for initiation of an interference with Yang et al. (U.S. 6,156,229).

The Examiner has rejected claims 61-65 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 32-35 of U.S. Patent No. 6,068,861 and U.S. Patent No. 6,110,387. Claims 61-65 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-61 of copending Application No. 09/732,601. Enclosed herewith are terminal disclaimers with respect to the above noted patents, a terminal disclaimer with respect to the copending application and an authorization to charge the appropriate fees. Therefore, there are no longer any double patenting issues remaining in this case.

If any matters remain that require further consideration, the Examiner is respectfully requested to telephone the undersigned at the number given below so that such matters may be discussed, and, if possible, promptly resolved.

Please continue to address all correspondence in this Application to Mr. Philip Pippenger at the address of record.

Respectfully submitted,



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CERTIFICATE OF MAILING

I hereby certify that in accordance with standard business practice, this paper (along with any referred to as being attached or enclosed) is to be deposited on the date shown below with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231.

August 24, 2001
Date

Veronica S. Kessler